

Claims:

What is claimed is:

5 1. A diagnostic test device for detecting the presence of microorganisms comprising:  
a cap component comprising  
at least one barrel component for receiving a swab, said at least one  
barrel component including an inside surface and an outside surface,  
and defining an interior barrel space,

10 a results window component for viewing test results from a test strip,  
said results windows component including at least one viewing window,

15 a reagent chamber component between said at least one barrel  
component and said results window component; said reagent chamber  
component defining an interior reagent chamber space in spatial  
communication with said at least one barrel component and said  
results window component and including at least one reagent chamber  
for containing at least one reagent or test solution, said reagent  
chamber component being rotatably connected to said results window  
component and rotatable with respect to a core contained in said  
reagent chamber space,

20 said core including a test strip; and

25 a swab component for removable insertion through said barrel  
component to said reagent chamber component;

30 whereby said reagent chamber component can be rotated from a pre-  
use position to a use position, such that when rotated said at least one  
reagent chamber moves from a closed position to an open position,  
thereby delivering reagent contained in said at least one reagent  
chamber onto said test strip.

35 2. The diagnostic test device of claim 1 wherein said barrel component includes a first  
interlocking mechanism on said inside surface, and said swab component includes a

second interlocking mechanism, such that said first and said second interlocking mechanisms releasably lock with each other, upon insertion of said swab component in said barrel component.

5     3. The diagnostic test device of claim 1 wherein said barrel component includes an elevated collar structure on said inside surface for directing said swab component to said reagent chamber component.

10    4. The diagnostic test device of claim 1 wherein said results window component defines a results window interior space having an angled interior wall angled upward toward said results window.

5     5. The diagnostic test device of claim 1 wherein said reagent chamber component includes at least two reagent chambers.

15    6. The diagnostic test device of claim 1 wherein said core includes structural extensions for directing a reagent to said test strip.

20    7. The diagnostic test device of claim 1, wherein said barrel component includes at least one flat side, said results window component includes at least one flat side in alignment with said barrel component flat side, and said reagent chamber component includes at least one flat side, whereby as said reagent chamber component is rotated with respect to said results window component, said reagent chamber component flat side becomes aligned with said barrel and results window components flat sides, as 25    said reagent chamber component moves from a closed to an open position.

30    8. The diagnostic test device of claim 1, wherein said barrel component includes at least one marking, said results window component includes at least one marking in alignment with said barrel component marking, and said reagent chamber component includes at least one marking, whereby as said reagent chamber component is rotated with respect to said results window component, said reagent chamber component marking becomes aligned with said barrel and results window component markings, as said reagent chamber moves from a closed to an open position.

35    9. The diagnostic test device of claim 8, wherein said markings are selected from lines, patterns, symbols, flat and textured surfaces.

10. The diagnostic test device of claim 1, wherein said test strip is an elongated test strip which extends from said reagent chamber component to said results window component.

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11. The diagnostic test device of claim 1, wherein said core is U-shaped.

12. The diagnostic test device of claim 1, wherein said core is circular.

10 13. The diagnostic test device of claim 11, wherein said U-shaped core defines an interior core space, and said U-shaped core includes an opening into said core space defined by an inner arc in degrees, and further wherein said reagent chambers are defined by an outer arc in degrees, wherein said inner arc is greater in size than said outer arc.

15 14. The diagnostic test device of claim 1, wherein said reagent chamber component includes side walls, said core has an outer wall, and at least one reagent chamber is formed from said side walls and said outer wall.

15. The diagnostic test device of claim 1, wherein said reagent chamber component  
20 includes side walls of a certain height, said barrel component and said results window component include walls of a height greater than or equal to said reagent chamber side walls, and at least one reagent chamber is formed from said reagent chamber component side walls and said barrel and results window component walls.

25 16. The diagnostic test device of claim 1, wherein said core is integrally connected to said results window component.

17. The diagnostic test device of claim 1, wherein said core is integrally connected to said barrel component.

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18. The diagnostic test device of claim 1 wherein said reagent chamber component is integrally connected to said barrel component and is rotatable with said barrel component.

35 19. A method for detecting the presence of microorganisms comprising the steps of:

a) providing a diagnostic test device comprising:  
a cap component comprising  
5 at least one barrel component for receiving a swab, said at least one barrel component including an inside surface and an outside surface, and defining an interior barrel space,  
a results window component for viewing test results from a test strip, said results windows component including at least one viewing window,  
10 a reagent chamber component between said at least one barrel component and said results window component; said reagent chamber component defining an interior reagent chamber space in spatial communication with said at least one barrel component and said results window component and including at least one reagent chamber for containing at least one reagent or test solution, said reagent chamber component being rotatably connected to said results window component such that when rotated, said reagent chamber within said reagent chamber component moves from a closed position to an open position,  
15 a core situated within said reagent chamber space, said core being independent from said reagent chamber component and including a test strip; and  
20  
25 a swab component for removable insertion through said barrel component to said reagent chamber component,  
b) swabbing said swab component onto a selected body cavity or environmental location,  
30  
35 c) inserting said swab component through said barrel component and into said reagent component, thereby placing the swab on said swab component adjacent said test strip;

d) rotating said reagent chamber component such that said reagent chamber moves from a closed to an open position, thereby delivering said reagent onto said swab and said test strip,

5 e) viewing said test strip through said window.

20. A diagnostic test device for detecting the presence of microorganisms comprising:

a cap component comprising

10 at least one barrel component for receiving a swab, said at least one barrel component including an inside surface and an outside surface, and defining an interior barrel space,

15 a results window component for viewing test results from a test strip, said results windows component including at least one viewing window,

20 a reagent chamber component between said at least one barrel component and said results window component; said reagent chamber component defining an interior reagent chamber space in spatial communication with said at least one barrel component and said results window component and including at least one reagent chamber for containing at least one reagent or test solution, said reagent chamber component being rotatably connected to said results window component and rotatable with respect to a core contained in said reagent chamber space, said core including a test strip,

25 30 whereby said reagent chamber component can be rotated from a pre-use position to a use position, such that when rotated, said at least one reagent chamber moves from a closed position to an open position, thereby delivering reagent contained in said at least one reagent chamber onto said test strip.